REMARKS

A. OVERVIEW

Claims 1-25, 54-57 and 64-66 are pending in the present application. Claims 26-53 and 58-63 have been withdrawn pursuant to a restriction requirement.

The present response is an earnest attempt to place the application in form for allowance. Reconsideration is respectfully requested.

B. § 112 REJECTION

Claim 18 was rejected as being indefinite based on the phrase "the curriculum". Claim 18 has been amended to change its dependency to eliminate any antecedent basis issue.

C. § 102 REJECTION

Claims 1-7, 14, 18-20, 54, 55, 64 and 66 have been rejected under 35 U.S.C. § 102 on the basis of Cook U.S. Patent 5,727,950. The Examiner takes the position the Cook patent discloses the Applicants' claimed invention. This rejection is respectfully traversed.

Applicants' specification clearly articulates the problem in the art which Applicants' invention attempts to solve. It is generally acknowledged that assessment of the most effective learning strategy for individual students is difficult. *See* Applicants' published specification, numbered paragraph 3. The state-of-the-art does have allegedly automated learning systems that are "customizable" for each student. Difficulty of learning tasks are adjusted based upon the individual student's responses. However, conventional state-of-the-art systems determine level of difficulty based on the student's "mastery" of the questions about the subject matter. Applicants' claimed invention differs from the state-of-the-art "mastery" standard of student

performance. As stated in Applicants' specification (*see* published application paragraphs 21-26):

> "2.2 fundamental differences from other methods
> Fundamental differences of aspects of the invention are:
> (a) the rules driving progression through the curriculum of the software are driven by a performance criterion that is different from other applications. Rather than assuming progress through the curriculum should be determined by "mastery" of given concepts by a performance standard (e.g., percent correct), the level of support necessary for a student to attain success at a given level of the curriculum drives the progression through the curriculum;
> (b) movement through the curriculum continues at the skill and language level that the student can perceive and perform.
> (c) the information transferred between components within the software to drive either placement or experiences within another component allow the system to integrate the decoding, structural strategies and the meaning-based strategies most appropriate for a given student.
> (d) the information transferred between the software components drives placement or experiences within another component to integrate the perception and production of language units."

The inventors believe that this departure from a "mastery"-type performance monitoring improves an individual's ability to learn. The improvement is through monitoring what types of things allow a student to perceive and perform learning tasks, by monitoring the "support" needed by the individual student to learn. The result, it is believed, is a system that better enables an individual to internalize learning, which in turn improves their ability to generalize learning. *See* Applicants' published application, paragraphs 9 and 11.

Applicants' Summary of the Invention describes this further. The present claimed invention is not merely an electronic workbook. It tries to discern the appropriate developmental level of the learner by deriving the type or stage of perception the student is capable of. Again, this departs from monitoring "mastery" of a task or set of tasks.

Independent claim 1 defines this difference:

> "A method of instruction comprising:
> (a) pre-designing a learning task and/or skill level for a student;

(b) pre-designing **a set of support** related to the learning task or skill level;

(c) presenting the learning task or skill level to a student;

(d) presenting to the student support from the pre-designed **set of support;**

(e) **adjusting the support presented to the student based on responses to the learning task or skill level from the student."**

(emphasis added). As can be seen, the method of instruction of claim 1 is keyed off of "the support". As described in the Applicants' specification, this is different from merely keeping track of right and wrong answers. As indicated at Applicant's Figures 2.13 and 2.14, success of performance in part does look at whether tasks are successfully accomplished. However, the monitoring of the student's performance also includes monitoring what levels of support exist with each task. Claim 1 specifically states that adjustment of support is based on the student's responses and that the learning task is presented at a given level of support.

Independent claim 54 has similar language:

"An apparatus for facilitating a learning task for a student comprising:

(a) a computer;

(b) the computer including a display, and processor, and a user input component;

(c) the computer including memory medium;

(d) software operatively installed on the memory medium;

(e) the software including a pre-designed learning task and/or skill level for a student;

(f) a database stored on the memory medium;

(g) the database including a pre-designed **set of support** and set of skills related to the learning task and/or skill level;

(h) the software adapted to:

(h1) present the learning task and/or skill level to a student on the display;

(h2) present on the display to the student **support** from the pre-designed **set of support;**

(h3) adjust the **support** presented on the display to the student based on responses to the learning task or skill level from the student;

(i) store in a database the student's responses. (emphasis added)."

Independent claim 66 has similar language:

"A method of instructing comprising:
(a) presenting a learning task or skill level to a student;
(b) assessing the student's response to a task by evaluating the amount of **support** given the student regarding the task;

(c) progressing or regressing the student based on monitoring the level of **support** needed for the student to successfully complete the learning task or skill level. (emphasis added)."

Claim 64 describes another aspect of the Applicants' invention. It addresses how a subsequent learning activity can be altered based on assessing the student's responses to a first learning activity:

"A method of instructing a student comprising:
(a) presenting to a student a first learning activity or skill level;
(b) assessing performance of the student in the first learning activity or skill level based on responses related to the first learning activity or skill level;

(c) identifying the student's level of performance relative the first learning activity or skill level;

(d) informing a second learning activity or skill level of the student's level of performance relative the first learning activity or skill level;
(e) deciding if the second learning activity or skill level should be altered."

The cited Cook '950 patent is entitled "Agent Based Instruction System and Method". It talks about adaptive, individualized programs for students, but appears to use a conventional method of monitoring performance—the "mastery"-type performance standard (how many right answers; how many wrong answers). For example, Figure 10B shows utilization of a "mean correct" as a method step for evaluating the student's responses. Column 5, line 37 talks about watching "previous student performance". Column 13, beginning at line 50 talks about how a "wrong answer" is determined. It can include time to make the answer in addition to the type of

error. Column 26, lines 40-51 state that monitoring a performance is based on a right or wrong answer, which determines an "error rate". Column 49, lines 25 and 26 talk about monitoring error rates. Column 51, lines 49-52 talk about generating subsequent events based on the number of retries needed by the student. Columns 62 and 63 discuss averaging or weighting the averaging the monitoring of the student responses.

Therefore, Applicants' independent claims 1, 54 and 66 explicitly differ from the Cook '950 reference because Cook '950 does not disclose using amount and type of support as the performance measure. Rather, Cook '950 uses the current state-of-the-art "mastery" (e.g. number of right or wrong answers).

For a prior art patent like Cook '950 to anticipate Applicants' claims, it must disclose each of the claimed elements in the arrangement of Applicants' claims expressly or inherently as interpreted by one of ordinary skill in the art. It is respectfully submitted that a *prima facie* case of anticipation has not been made out.

As stated, there is no showing that Cook '950 predesigns different levels of support related to a learning task or skill and then presents a one level of support, monitors how the student performs, then adjusts level of support based on student responses. Cook teaches that it might change the difficulty of a task based on student performance, but that monitoring of performance is based on the history of right or wrong answers, not on the level of support presented with the tasks. Therefore, it is respectfully submitted that Cook '950 does not anticipate Applicants' claimed invention.

Claims 2-25 and 55-57 are dependent from either independent claims 1 or 54 and therefore submitted to be allowable over Cook '950 for the reasons expressed in support of claims 1 and 54.

Claim 64 is also submitted to be patentable over Cook '950. A *prima facie* case of anticipation has not been made out. It is not seen how Cook '950 includes the limitations of assessing performance in a first learning activity or skill level and then informing a second activity or skill level based on the performance in the first case, as set forth in Applicants' claim 64.

Claim 65 depends on claim 64 and is submitted to be allowable for the reasons expressed in support of claim 64.

D. § 103 REJECTION

Claims 8-13, 15-17, 21-25, 56, 57 and 65 have been rejected as being obvious based on Cook '950 and further in view of Wasowicz U.S. Patent 6,435,877. This rejection is respectfully traversed.

These claims are dependent from independent claims 1, 54 and 64 and are believed allowable for the reasons expressed in support of those independent claims. Specifically, Cook does not disclose or teach utilization of level of support as a performance monitoring criteria.

To establish obviousness, the combination of Cook '950 and Wasowicz '877 must teach a reason, suggestion or motivation to combine their teachings and, when combined, they must appear to show or suggest the claimed invention to one of ordinary skill in the art.

The Wasowicz reference discloses monitoring performance based on "mastery" of the tasks. *See, for example,* Wasowicz Figure 12, block 188 ("analyze response regarding correctness and performance"). Column 2 line 65 through column 3 line 5 of Wasowicz states:

> "In particular, each training module may change the difficulty of a task based on the past performance of the user. For example, in some training modules, the difficulty of the task is increased when the user provides a

predetermined number (e.g., three) of sequential correct responses while the difficulty of the task is decreased when the user provides a predetermined number (e.g., two) of sequential incorrect responses."

Wasowicz column 7 lines 10-20 states:

> The score database 112 may store the scores for one or more users of one or more games contained in the training tool. The score database 112 permits the user's progress of each skill to be monitored and analyzed. The game administrator and scorer module 114 controls which game is being played, the user interface for the particular game, the score of the particular game and the level of difficulty for each game. In this manner, the user of the training tool does not keep track of his/her score or progress since the system may automatically track and report the scores and progress of each user that uses the system."

Therefore, like Cook '950, Wasowicz '877 has not been shown to contain a material limitation of Applicants' independent claims 1, 54 and 66. It relies on the number of correct responses to measure performance of the test or task. Therefore, even if Cook and Wasowicz are combined, Wasowicz does not fill in a critical gap in the teaching relative to the Applicants' claimed invention.

It is therefore respectfully submitted that a *prima facie* case of obviousness has not been established by the combination of Cook '950 and Wasowicz '877.

E. CONCLUSION

It is respectfully submitted that all matters raised in the Office Action have been addressed and remedied and that the Application is in form for allowance. Minor revisions to some of the claims have been made in this Response to correct inadvertent typographical or grammatical errors. It is therefore respectfully submitted that the rejections to the claims should be withdrawn and the Application passed to allowance.

This is a request under the provision of 37 CFR § 1.136(a) to extend the period for filing a response in the above-identified application for three month from July 7, 2004 to October 7, 2004. Applicant is a large entity; therefore, please charge Deposit Account number 26-0084 in the amount of $980.00 for three months to cover the cost of the extension. Any deficiency or overpayment should be charged or credited to Deposit Account 26-0084.

Reconsideration and allowance is respectfully requested.

Respectfully submitted,

MARK D. HANSING, Reg. No. 30,643
McKEE, VOORHEES & SEASE, P.L.C.
801 Grand Avenue, Suite 3200
Des Moines, Iowa 50309-2721
Phone No: (515) 288-3667
Fax No: (515) 288-1338
CUSTOMER NO: 22885

Attorneys of Record

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